



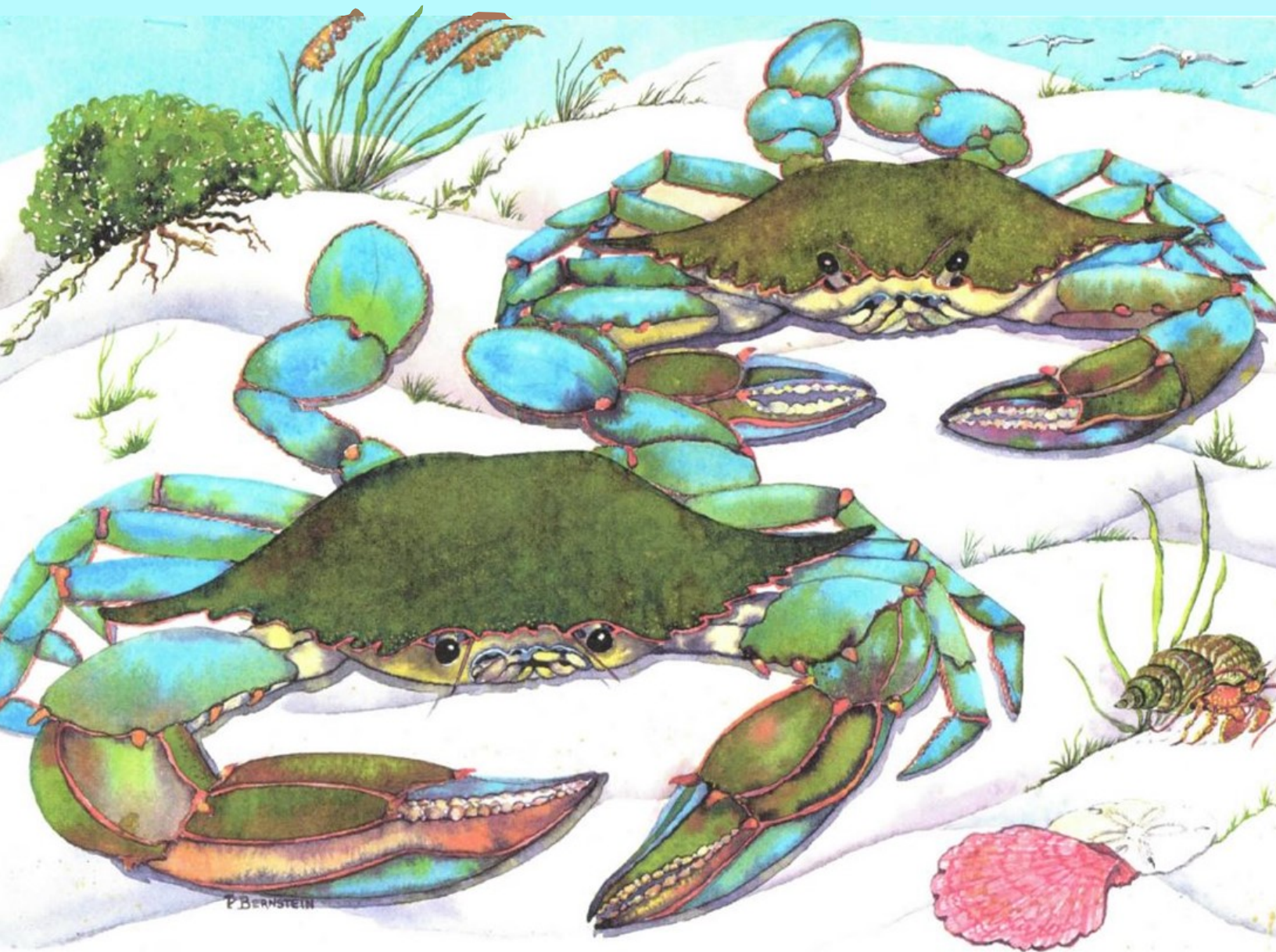
ENHANCE • PROTECT • CONSERVE

Spring 2017

The Blue Crab Beacon

A newsletter of the Mississippi Department of Marine Resources

Shrimp and Crab Bureau



Cover Artwork by Pat Bernstein of Gautier, Mississippi

Derelict Crab Trap Removal and Recycling Program



A dumpster full of derelict crab traps turned in by local crab fishermen at Bayou Caddy in Hancock County.

The Mississippi Derelict Crab Trap Removal Program began in 1999. These derelict traps can be hazardous to boating and may contribute to ghost fishing (the incidental catch of animals in derelict traps). Since its inception, 21,546 lost or derelict traps have been removed and recycled from Mississippi



A multi-generational crabbing team turns in derelict crab traps at this year's cleanup.

waters. Mississippi's commercial crab fishermen are a vital part of the success of this program. From cooperating with closures and moving their active gear to assisting in the locating and removal of derelict traps, it could not have been done on this scale without their participation. Through volunteer efforts and various grants obtained by MDMR, Mississippi commercial fishermen have removed 14,951



A cleanup participant brings in a full load of derelict traps.

derelict traps. "I think the derelict crab trap program has been a wonderful success for the crabbing community, as well as for the environment," says longtime commercial crabber McIlwain "Wain" Rogers. Removal of these lost traps greatly benefits the long-term sustainability of not only the crab fishery, but the marine environment as well. Commercial crab fishermen are to be commended for their role in conserving our marine resources.

Commercial Fishermen

Trip Tickets – Monthly Submission Forms Required

A Fresh Product Permit is required if you sell your catch to anyone other than a licensed seafood dealer or processor. This is a reminder that while in possession of a Fresh Product Permit you must submit a Monthly Submission Form (See example on page 4) by the 10th of the following month indicating the number of trips taken even if that number is zero. If you sell your catch to anyone other than a licensed seafood dealer or processor you must fill out a trip ticket (See example on page 5) for each trip and send it in with your Monthly Submission Form. **The important landing information you submit is strictly confidential and can only be viewed by you and employees of the MDMR designated as information confidentiality port reporters. Your reports are valuable to fisheries Managers.**

Title 22 Part 09 Chapter 06 Section 100 Seafood Reporting Requirements

All trip tickets shall be returned to the MDMR or electronically submitted on or before the 10th of each month for actual transactions from every commercial fisherman during the preceding month. A monthly summary form that states the total trips taken in a given month shall be submitted by the 10th of each month by the seafood dealer/processor or commercial fisherman.

Title 22 Part 09 Chapter 13 Section 100 Penalties

Any unlawful act under this Part committed by any person, firm, or corporation shall be deemed a violation of the provisions of this Part and shall constitute a misdemeanor and upon conviction, said person shall be punished in accordance with Mississippi Code Ann. § 49-15-63, as amended, unless a penalty is specifically provided elsewhere in the Mississippi Code Ann. of 1972, as amended.

If you have any questions or need help please contact the Trip Ticket Office at 228-374-5000

1. FISHERMAN'S NAME:

Name on the commercial license

2. FISHERMAN'S LICENSE:

License number, Must be a current Type 10, 79, 22 or 80

3. DATE LEFT DOCK:

Date when trip started

4. VESSEL STATE REGISTRATION OR COAST GUARD NUMBER:

Doc – Reg No. as listed on commercial fishing license

5. PRIMARY AREA FISHED CODES:

Hancock County – 45

Harrison County – 47

Jackson County – 59

AL State Waters North of Dauphin Isl. - 112

Lake Borgne – 121

6. PRIMARY GEAR USED CODES:

Blue Crab Traps – 131

Trawl for Crabs – 091

7. FISHING TIME:

Number of Hours gear was in the water (Soak Time)

8. GEAR QUANTITY:

Number of traps that were checked on the trip

9. SEAFOOD DEALER OR FRESH PRODUCT PERMITTEE'S NAME:

Name of your business

10. TRANSACTION DATE:

Date you purchased the seafood

11. COUNTY LANDED CODES: (County where boat unloaded)

Hancock County – 45

Harrison County – 47

Jackson County – 59

12. DEALER'S LIC. or FRESH PRODUCT PERMIT No:

Dealers license number, Must be a current Type 16

13. SPECIES CODE:

Blue Crab – 7000

Stone Crab – 7176

14. QUANTITY:

Weight of crab purchased in pounds

15. UNIT CODES:

Pounds – LB

16. CONDITION CODES:

Live Crabs – 02

Soft Shell – 67

Stone Crab Claws – 65

17. COUNT OR MARKET:

Unknown Grade – UN

Large (#1 Crab) – LG

Medium (#2 Crab) – MD

Small (#3 Crab) – SM

18. PRICE PER UNIT:

How much you paid the fisherman for each pound of crab

CRAB (USE SINGLE TRIP TICKET)

When Filling Out All Trip Tickets

Reporting Reminders

- You must send in a monthly submission form at the end of every month, even if you did not buy any seafood from fishermen.
- Do not write messages in the squares. You may write notes in the white area or on a separate paper.
- It is important that you write legibly and stay within the outlined boxes.
- Do not use dashes, commas or periods.
- Use only one number per block.
- If a mistake is made liquid paper may be used or use a new trip ticket.
- Use only black ball point pen.



TRIP TICKET
MONTHLY SUBMISSION FORM
Mississippi Department of Marine Resources
Trip Ticket Coordinator
1141 Bayview Avenue
Biloxi, MS 39530
(228) 374-5000 or (800) 374-3449

This report must be submitted monthly in order to comply with the requirements of MS Title 22 Part 9 and rules and regulations adopted pursuant to those statutes. Completed trip tickets for the time period should accompany this form. DO NOT STAPLE TRIP TICKETS.

USE BLUE OR BLACK INK ONLY

License No.

1 0 0 1 2 3 4

Current Date:

02 / 01 / 17

Reporting Period

From:

01 / 01 / 17

To:

01 / 31 / 17

No of tickets

0

By signing this document I hereby certify the following:

the attached trip tickets represent all transactions of fish and shellfish obtained from anyone other than a licensed dealer for the reporting period described above.

all records (receipts) submitted in this report constitute all transactions required to be reported by law.

all the attached information is accurate and accounts for all actual business transactions required to be submitted in this report.

I understand that providing false information may result in criminal consequences.

PRINT

Dealer/Processor or
Fisherman Name:

John Doe

PRINT

Licensed
Dealer/Processor or
Fisherman:

John Doe

Please print all characters legibly inside the boxes with either *blue* or *black* ink ONLY. The following will serve as an example:

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TICKET NO. 1237234

Continuation Ticket No.

**Void
Ticket**

FISHERMAN PROVIDED INFORMATION

Commercial Fisherman's Name (Please Print)

John Doe

Fisherman's Lic. 1 0 0 1 2 3 4

Date Left Dock 01 / 01 / 17

VESSEL NAME

Coast Guard Documented
Vessel Number

OR
State Vessel Registration
Number

Primary Area
Fished

Fishing Time

Primary Gear Used

Quantity
of Gear**SEAFOOD DEALER OR FRESH PRODUCT PERMITTEE PROVIDED INFORMATION**

Seafood Dealer or Fresh Product Permittee's Name (Please Print)

ABC Seafood

Transaction Date 01 / 03 / 17

State Landed **28**

County Landed 47

Dealer's Lic. or Fresh Product Permit No. 1004321

[illegible]

ITEM	<u>DEDUCTIONS</u>	COST
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total Purchases	1162.50
Total Deductions	
Total Paid	

DMR Copy

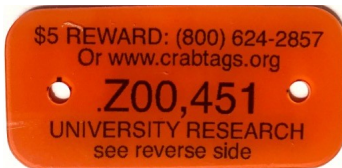
SEAFOOD DEALER OR FRESH PRODUCT PERMITTEE SIGNATURE

Modified 11/01/11

Gulf Wide Blue Crab Tagging Project

by Zachary Darnell, Ph.D.

Assistant Professor, Division of Coastal Sciences



Researchers at the University of Southern Mississippi's Gulf Coast Research Lab (GCRL), led by Zachary Darnell, Ph.D., are tagging mature female blue crabs across the Gulf Coast. This project is a collaboration with state fisheries management agencies and commercial crabbers, with the goal of gaining a better understanding of crab migrations throughout the bays, bayous,



estuaries, and offshore waters of the Gulf of Mexico. Female blue crabs migrate seaward to spawn, moving to the high-salinity waters needed for the offspring to survive. When a crab is tagged, researchers record the location, date, and tag number. When that crab is later recaptured and reported, researchers can use the information on where and when it was caught to determine when it began the migration, how far and how fast the crab moved, and the route taken by the crab. This information is important for understanding blue crab migrations into and out of each state's fishable

waters, and for ensuring the continued productivity of this valuable fishery.

Over the last year, nearly 6,000 female blue crabs have been tagged and released, and over 800 of these have been recaptured and reported. Tagging will continue for at least another year. Tags are orange, printed plastic rectangles attached with wire wrapped around the lateral spines of the crabs. If you catch a tagged crab, please report it by calling 1-800-624-2857 or online at www.crabtags.org. A \$5 cash reward is being offered for each tagged crab that is reported. You do not have to return the crab to get the \$5 reward. An additional reward may be available if the crab is frozen for return to GCRL, for the first 500 crabs returned (GCRL personnel will come to you to pick up the frozen crab-please do not mail).



Additional commercial crabbers are being recruited to help tag crabs. If you are interested in working with GCRL personnel to tag crabs, please contact Zachary Darnell at 1-800-624-2857 or by email at zachary.darnell@usm.edu.

REWARD



TAGGED BLUE CRABS

If caught, please report the following information to **1-800-624-2857** or **www.crabtags.org**:

- Tag number
- Capture date
- Capture location (GPS if possible)
- Egg mass/sponge color (if present)

Researchers at the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, MS are tagging mature female blue crabs to better understand their migrations for the continued sustainability of blue crab fishery. Crabs are being tagged both inshore (bays and estuaries) and offshore in all five Gulf states. If you catch a tagged crab, please report it. **There is a \$5-50 reward for every reported tag, and a possible extra reward if the crab is frozen with the tag still attached. Crabs can be returned to GCRL or, if needed, picked up by a staff member. Extra rewards are available only for the first 500 crabs returned.**

EFFECTIVE JANUARY 1, 2017 ESCAPE RINGS WILL BE REQUIRED IN ALL CRAB TRAPS FISHED IN MISSISSIPPI WATERS

Escape rings were designed to allow sublegal crabs (those less than 5") to escape from the trap. The use of escape rings in your crab traps will have a positive impact on Mississippi's Blue Crab fishery for years to come. Please make sure to properly install at least one 2 3/8" escape ring on the outside wall of each crab retaining chamber of your trap(s). The updated regulation requiring the use of escape rings can be found in Title 22 Part 4 Rules Regulations for the Taking of Crabs In

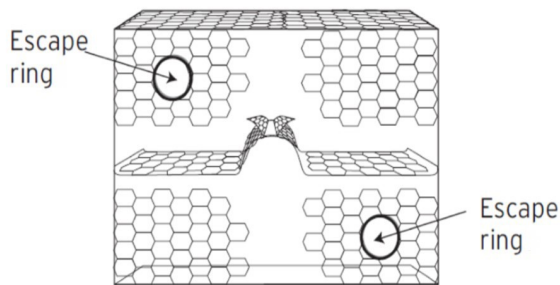


Diagram Courtesy of TPWD 2015-16 Texas Commercial Fishing Guide

Escape Rings should be placed on the outside vertical walls (not on the top or bottom of the trap), with at least one ring located in each chamber of the trap.



To install Escape Rings in your crab trap, cut out the appropriate mesh (3 square inches) then secure the escape rings in each of the 4 corners by using zip ties or

TITLE 22 PART 4 RULES AND REGULATIONS FOR THE TAKING OF CRABS IN THE STATE OF MISSISSIPPI

Chapter 06 Gear Regulations

115 All crab traps placed in the marine waters of the State of Mississippi shall be equipped with no less than two (2) escape rings positioned on the vertical outside walls of the trap, with at least one (1) ring located in each chamber. Escape rings must have a minimum of 2 and 3/8 inches

For more information contact the Mississippi Department of

Escape rings will be available free of charge to all licensed MISSISSIPPI RESIDENT COMMERCIAL AND RECREATIONAL CRAB FISHERMEN.

In order to receive escape rings at no cost, please bring a copy of your Mississippi Resident Commercial and/or Recreational Crab trap License to the MDMR Bolton Building located at 1141 Bayview Ave Biloxi, MS beginning Monday, October 3, 2016.

Voluntary Turtle Excluder Device (TED) Information

Credit: Christina Mohrman



A Turtle Excluder Device (TED) is a simple rectangular device that restricts the size of a crab trap's entrance funnel so that animals other

than crabs cannot enter the trap. The TED is made of plastic or metal and attaches to the inner entrance funnel with hog rings or wire. The TEDs that are provided FREE by the Mississippi Department of Marine Resources through the Bonnet Carré Fishery Disaster Program funded through NOAA, currently measure 2"x 6". The Diamondback Terrapin is a type of turtle found in Mississippi's coastal waters. If incidentally caught in a crab trap, these terrapins could possibly drown.

Using crab traps fitted with TEDs reduces the number of terrapins caught by up to 90%.

Numerous studies have shown that TEDs do not

negatively impact

crab catch. TEDs:

1) Do not affect

the size of crabs

caught and 2)

May actually

increase the

number of crabs

caught (up to

49% increase reported).

A Mississippi study did not

show any effect on the size or number of crabs

caught in traps fitted TEDs vs. standard crab traps.



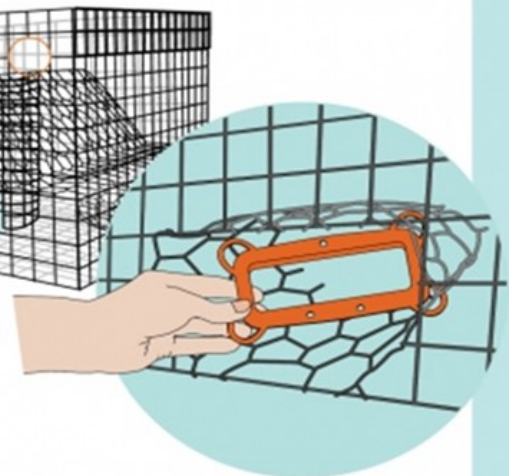
Credit: MS Dept. of Marine Resources

How to Install a Turtle Excluder Device (TED)

1 Obtain a TED (metal or plastic) for each funnel opening in the crab pot, along with heavy plastic cable ties. Hog rings or cable ties can be used to attach metal TEDs.



2 Position the TED in the rear area of the funnel opening.



3

Loop heavy plastic cable ties around the TED's corners and through the funnel wire. Pull the plastic tie closed and trim the excess cable.



Use a minimum of four cable ties to attach the TED in funnel opening. Additional cable ties may be needed to achieve a firm attachment.

Illustrations provided by Kelly Finan ©

For more information on Turtle Excluder Devices please contact:

Mississippi Department of Marine Resources
1141 Bayview Avenue Biloxi, MS 39530
(228) 374-5000 dmr.ms.gov



Grand Bay National Estuarine Research Reserve
6005 Bayou Heron Road Moss Point, MS 39562
(228) 475-7047 grandbaynerr.org

 /MississippiDMR



 /GrandBayNERR

NOTICE

**IT IS ILLEGAL TO TAKE CRAB
TRAPS OR CRABS FROM TRAPS
NOT LICENSED TO YOU!**

(Section 49-15-92 Mississippi Code of 1972)

**PUNISHABLE BY A FINE OF UP
TO \$500 FOR THE FIRST OFFENSE**



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**For more information, call the Mississippi
Department of Marine Resources at (228) 374-5000**

How to Identify Molt Stages in the Blue Crab

by

Harriet Perry, Senior Research Scientist

University of Southern Mississippi, Center for Fisheries Research & Development

Gulf Coast Research Laboratory

As with other crustaceans, the blue crab must molt or shed its hard, outer shell (exoskeleton) in order to increase in size. When the body grows too large for the old exoskeleton, a new soft one forms beneath it. A crab preparing to molt is called a “peeler” or a pre-molt crab.



Figure 1A. Suture lines on the carapace of a pre-molt crab.

Pre-molt or peeler crabs show definite signs of shedding and can be separated from inter-molt or hard crabs. Prior to molting, blue crabs absorb the calcium from specific areas of the exoskeleton called suture lines. These suture lines split open to help the crab back out of the shell. These lines are found under the long lateral spines of the carapace and in a segment of the claw called the merus (Figures 1a and b). Many fishermen check these areas first to see if the suture lines are present and soft.



Figure 1B. Suture lines on the merus of a pre-molt crab.

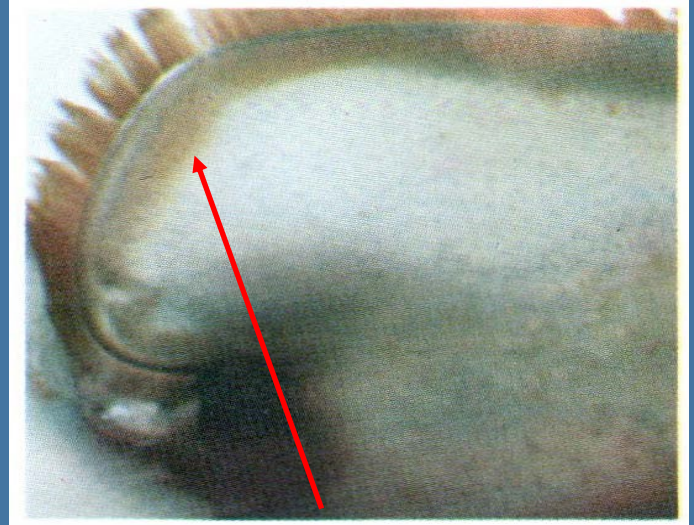


Figure 2. White line stage.

Other molting signs involve changes in coloration. A common method of molt stage determination is to check the last two segments of the swimming leg or paddle where the newly formed shell is most easily visible. As the crab approaches the molt, a white or cream colored line appears just inside the edge of the paddle (Figure 2). White line crabs usually shed within 7 to 14 days. Crabs 3 to 6 days away from shedding have a pink line (Figure 3) in that area and crabs with a red line will shed in 1-3 days (Figure 4).

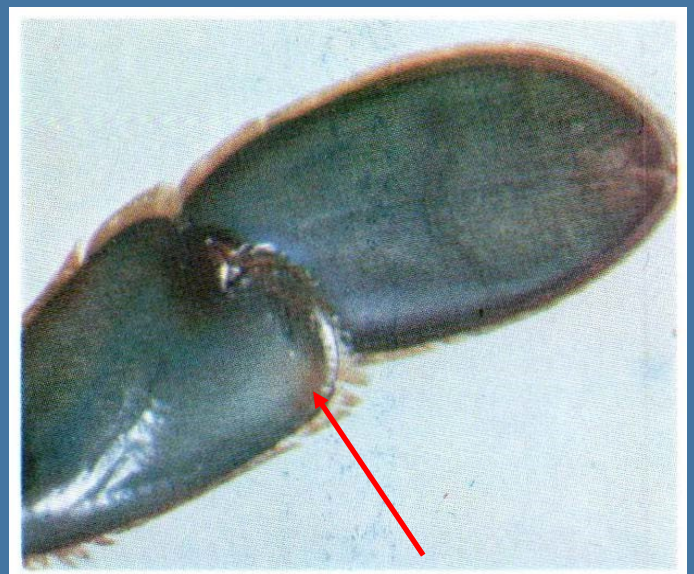


Figure 3. Pink line stage.

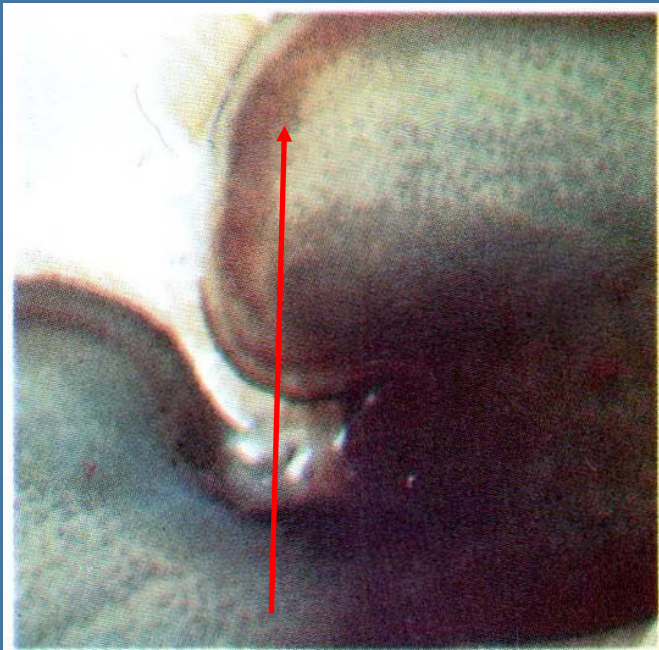


Figure 4. Red line stage.

Other signs of shedding include changes in the color of the abdomen or apron in immature female crabs [from creamy white to reddish-purple (Figure 5)] or the possession of well-developed limb buds (Figure 6). Based on coloration changes, crabs are classified

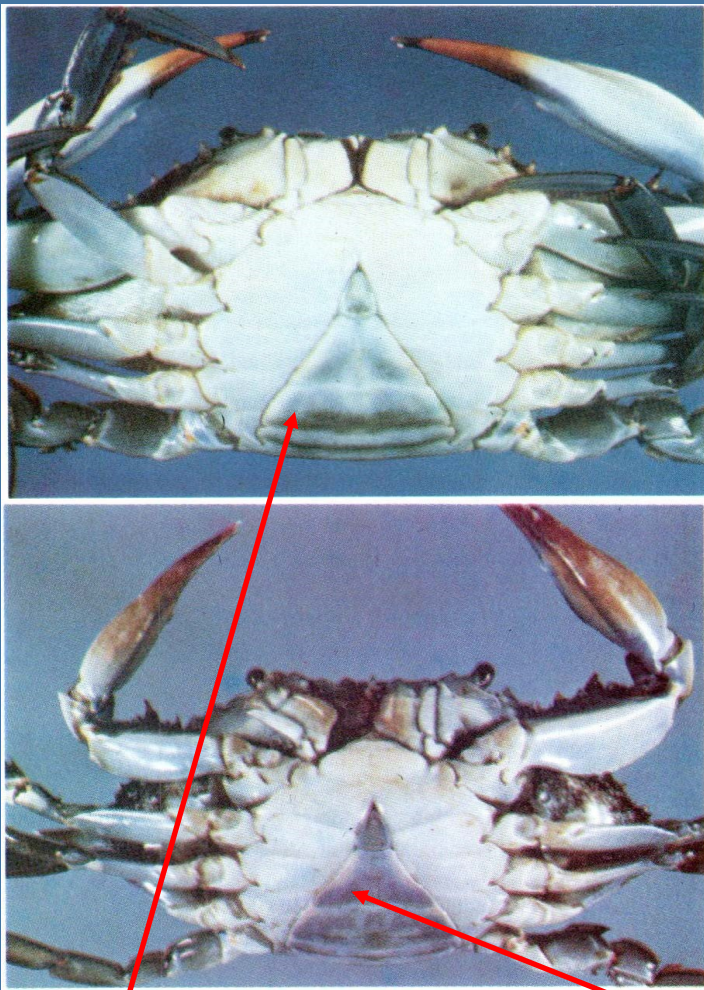


Figure 5. Immature female abdomen; intermolt (top) and ripe (bottom).

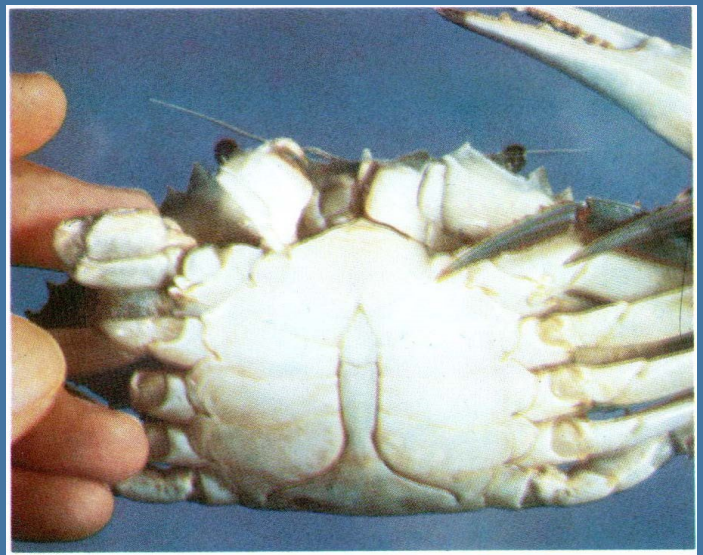


Figure 6. Male crab with well developed limb bud.

as either green (white line) or ripe/rank (pink and red line). In some areas the term green crab refers to those crabs that show no signs of molting. When holding crabs, it's important to separate white lines from pink and red line crabs as white line crabs are still capable of feeding. White line crabs should be graded every 2-3 days to see if they show signs of advancing to the pink line stage.

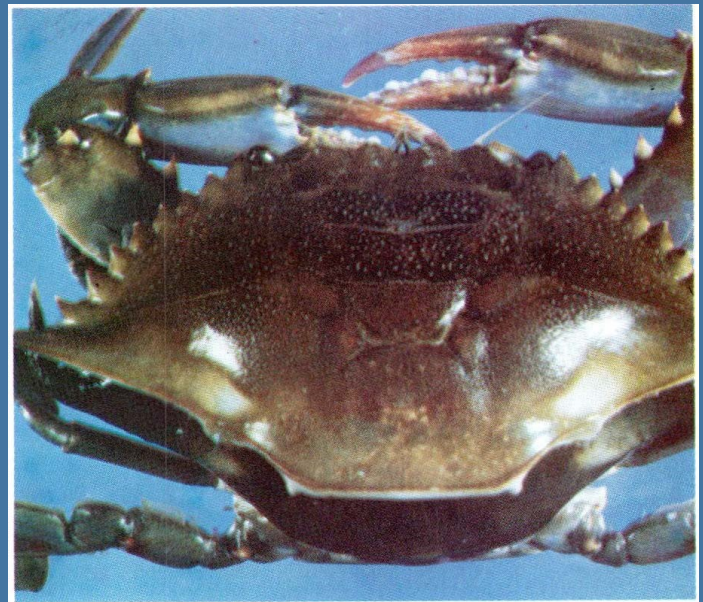


Figure 7. "Buster"

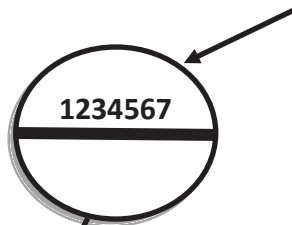
The "buster" or "softshell" stage begins when the hard shell splits across the back and the crab starts to pull out of the old shell (Figure 7). To expand its soft and wrinkled body, the crab takes in large amounts of water to stretch the new shell and allow for future growth. The soft shell begins to harden soon after molting. Paper-shell or "leather" crabs have begun to harden and are marketable, but soft crabs bring top prices.

Title 22 Part 4

Rules and Regulations For The Taking of Crabs in the State of Mississippi

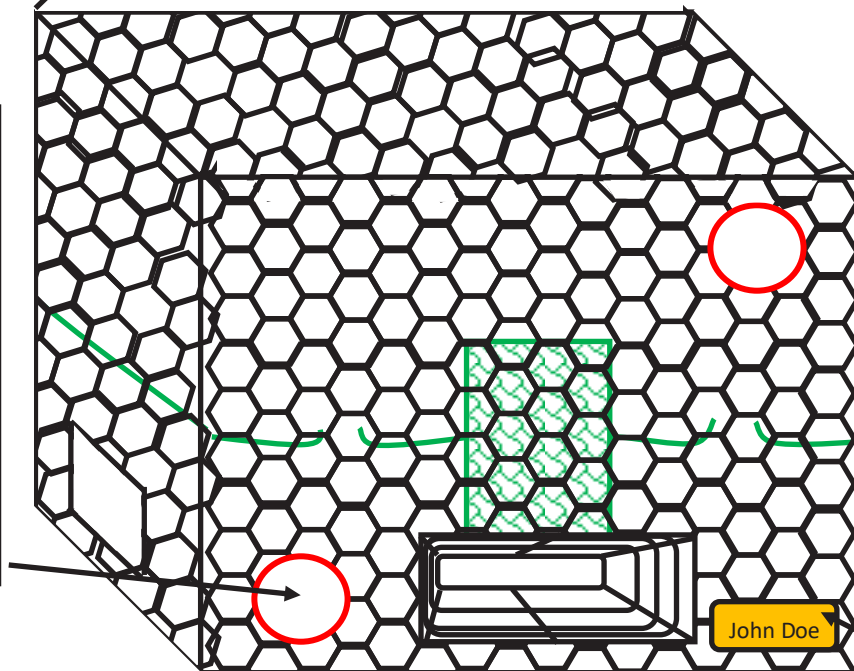
Chapter 6—Gear Regulations Review

Float: All crab traps or pots placed in the marine waters of the state of Mississippi must be marked with a float of at least six (6) inches in height, six (6) inches in length and six (6) inches in width and the float must have a highly visible color. It shall be unlawful for any person, firm or corporation, fishing for crabs by means of crab traps to fail to mark each said trap float with the corresponding commercial or recreational crab license number in such a manner to be clearly visible to an inspecting officer. However, licensed commercial crab fisherman may obtain a registered color code design from the Mississippi Department of Marine Resources (MDMR), Marine Patrol Office. Once obtained, this color code must be placed on each buoy or float and painted or affixed to each side of the vessel used to harvest crabs from said traps or pots.



Float Line: Buoys shall be attached to crab traps by use of a weighted line or non-floating line. It shall be unlawful for any person, firm, or corporation to attach any buoy or float to any crab trap or pot with materials other than lines of nylon, hemp, cotton or woven synthetic materials which can easily be cut with a standard steel knife.

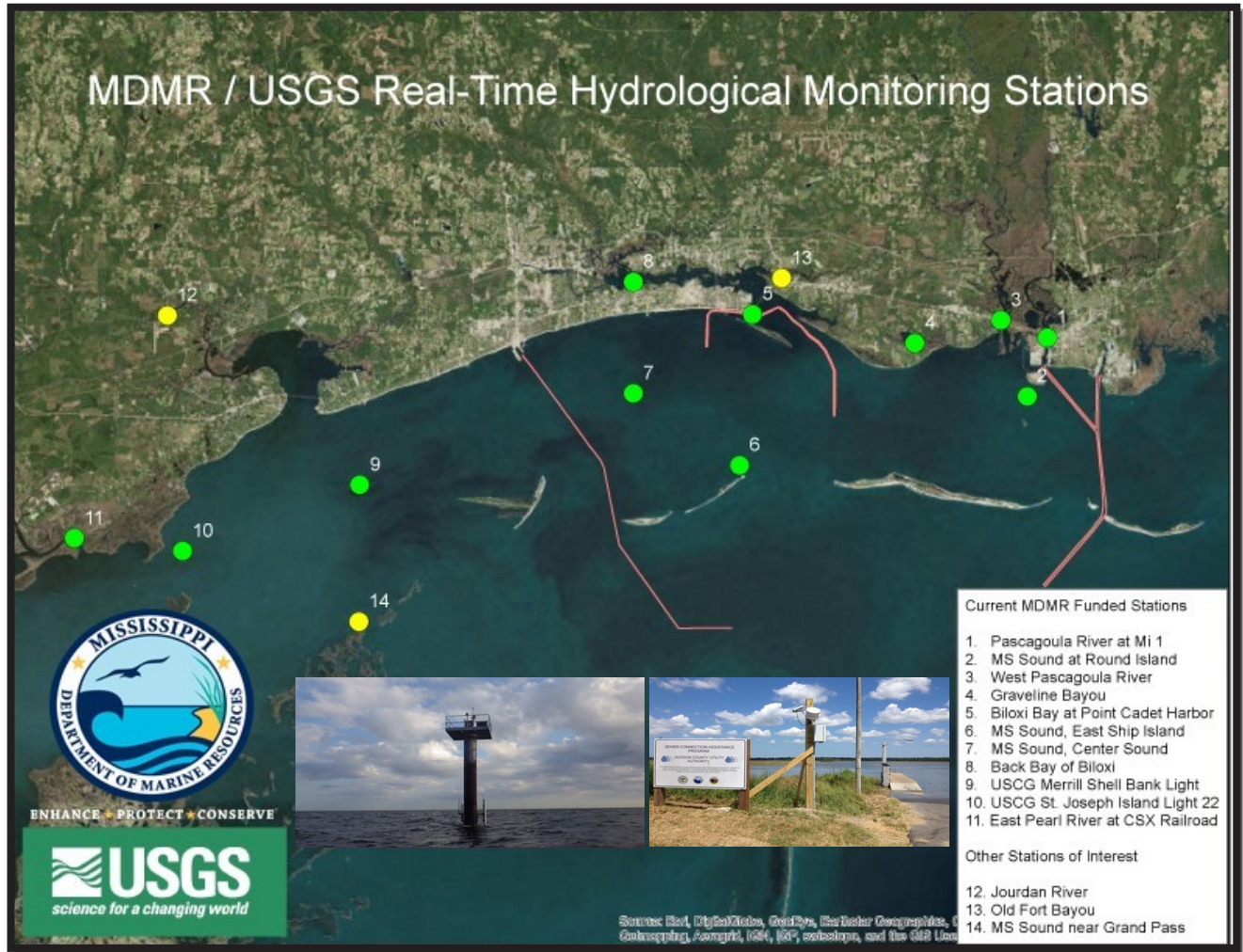
Escape Rings: All crab traps placed in the marine waters of the State of Mississippi shall be equipped with no less than two (2) escape rings positioned on the vertical outside walls of the trap, with at least one (1) ring located in each chamber. Escape rings must have a minimum of 2 and 3/8 inches inside diameter. From April 1 to June 30 and from September 1 to October 31, escape rings may be obstructed for the purposes of retaining peeler or buster crabs.



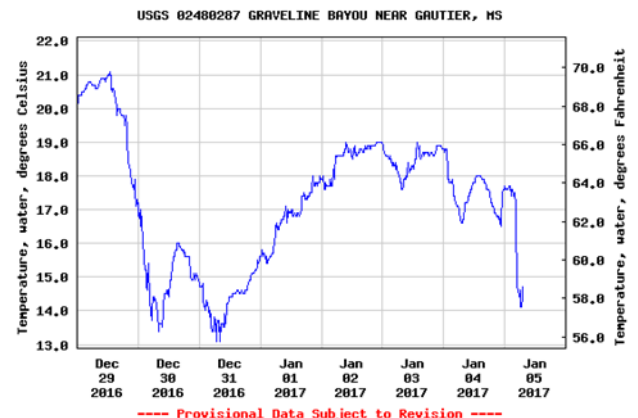
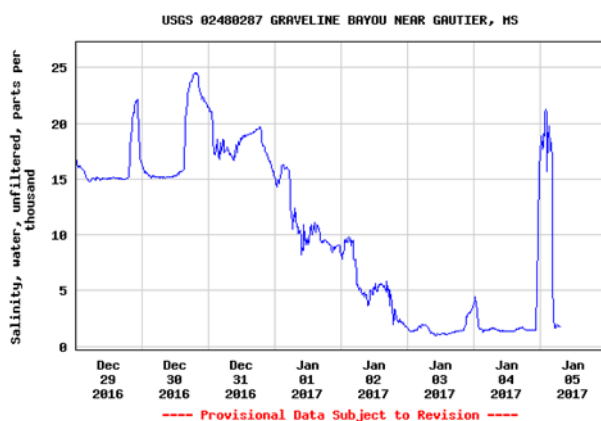
Name Tag: All crab traps placed in or on the marine waters of the State of Mississippi shall utilize the following materials to permanently mark the crab trap for ownership: a corrosion resistant metal or plastic tag must be attached to the trap. The tag used to mark the traps must be legibly and permanently stamped with letters containing the applicable licensed crab fishermen's full name. The minimum height of the letters must be at least 3/16 of an inch.

For the full text of Title 22 Part 4, please visit MDMR's website at dmr.ms.gov.

MDMR Hydrological Monitoring Stations provide updated environmental information for the Mississippi Sound



The Mississippi Department of Marine Resources (MDMR) currently funds 11 hydrological monitoring stations throughout the Mississippi Sound that record and update water temperature, salinity, turbidity, and gauge height every 15 minutes. Fishermen can utilize the stations to plan for fishing trips near areas of the stations throughout the sound by taking advantage of the near real-time data provided by the constant recorders. All the information collected by each station can be accessed at the MDMR website, dmr.ms.gov, under the “Environment” heading using the interactive map that links to the United States Geological Survey (USGS) website for each station. Computers, laptops, tablets, and smart phone devices can access the map at any time. A cooperative agreement between the MDMR and the USGS in 1998 provides funding for this project.





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Important Information about Crab Processing



If you are a crab harvester with a valid commercial crab license, you can sell your own catch live or dead in an unaltered state to a licensed seafood dealer/processor or the general public if you hold a fresh products permit. However, commercial crab processing is defined as handling, storing, changing into different market forms, manufacturing, preserving, picking, chilling, and packaging, labeling, or holding. Therefore, any licensed

commercial crab fisherman who is backing crabs and selling this product form (i.e. "Gumbo Crabs"), must first be certified and licensed as a seafood dealer/processor. The specific language regarding this regulation can be found in TITLE 22 PART 21 RULES AND REGULATIONS FOR THE PREPARATION, PICKING, PACKING, SHIPPING, AND SALE OF SALTWATER CRABS AND SALTWATER



CRAB PRODUCTS IN THE STATE OF MISSISSIPPI. For more information about processing crabs and how to become properly licensed, please contact the Seafood Technology Bureau at (228) 374-5000 or visit their web page at:

<http://dmr.ms.gov/index.php/marine-fisheries/seafood-technology>



Mississippi Department of Marine Resources

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Is a publication of

Mississippi Department of Marine Resources

Shrimp and Crab Bureau

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State of Mississippi

Phil Bryant
Governor

Mississippi Department of Marine Resources

Jamie M. Miller
Executive Director

Mississippi Commission on Marine Resources

Richard Gollott, Chairman
Commercial Seafood Processors

Steve Bosarge, Vice Chairman
Commercial Fishermen

Jolynne Trapani
Nonprofit Environmental Organizations

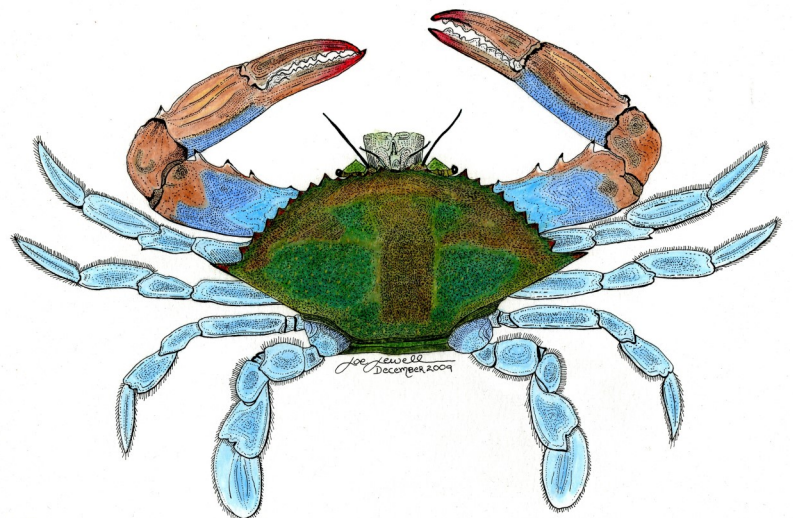
Ron Harmon
Charter Boat Operators

Mark H. Havard, II
Recreational Sports Fishermen



Photo courtesy of Biloxi Public Library Local History & Genealogy Department

Take advantage of free web marketing for fishermen at:
Ms.foodmarketmaker.com



Artwork by Joe Jewell